

LISTING OF CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) The method of claim 20, further comprising A
~~device for thermally cycling a sample, comprising:~~

~~at least one heating element;~~

~~a disc configured to receive samples; and~~

~~a mechanism configured to rotate the disc;~~

~~wherein rotation of the disc induces a turbulent airflow between at least a portion of the disc and at least a portion of the heating element.~~

2. (Currently Amended) The method of ~~The device according to claim~~
1, wherein the turbulent airflow is induced by a turbulence inducing area on the disc.

3. (Currently Amended) The method of ~~The device according to claim~~
2, wherein the turbulence inducing area includes at least one of slots, pegs, vanes, staggered vanes, and projections.

4. (Currently Amended) The method of ~~The device according to claim~~
1, wherein the turbulent airflow is induced by a turbulence inducing area on the heating element.

5. (Currently Amended) The method of ~~The device according to~~ claim 4, wherein the turbulence inducing area includes at least one of slots, pegs, vanes, staggered vanes, and projections.

6. (Currently Amended) The method of ~~The device according to~~ claim 1, further comprising excitation optics and detection optics to detect fluorescent light emitted by at least one label in the sample.

7. (Currently Amended) The method of ~~The device according to~~ claim 1, further comprising a feedback system to control the heating element and provide for substantially uniform heat distribution to at least one sample chamber located on the disc.

8.-13. (Cancelled)

14. (Currently Amended) The method of thermally cycling according to claim 13 ~~20~~, further comprising providing substantial thermal uniformity to at least one sample chamber located on the disc.

15. (Currently Amended) The method of thermally cycling according to claim 13 ~~20~~, further comprising exciting a label in at least one sample chamber located on the disc.

16. (Currently Amended) The method of thermally cycling according to claim 45 20, further comprising detecting light from the label.

17. -18. (Cancelled)

19. (Currently Amended) The method of thermally cycling according to claim 48 20, providing access comprises lifting a lid.

20. (Currently Amended) A method of thermally cycling, comprising:
at least one of introducing and removing heat with a heating element;
rotating a disc to induce a turbulent airflow; and
positioning the disc in a device for thermal cycling comprising ~~The method~~
~~of thermally cycling according to claim 18, providing access comprises loading a~~
~~tray to provide access to the interior of the device for thermal cycling,~~
wherein the disc is configured to receive samples; and
wherein there is an air gap between the disc and the heating element